

Architecture for
Transaction Evaluator

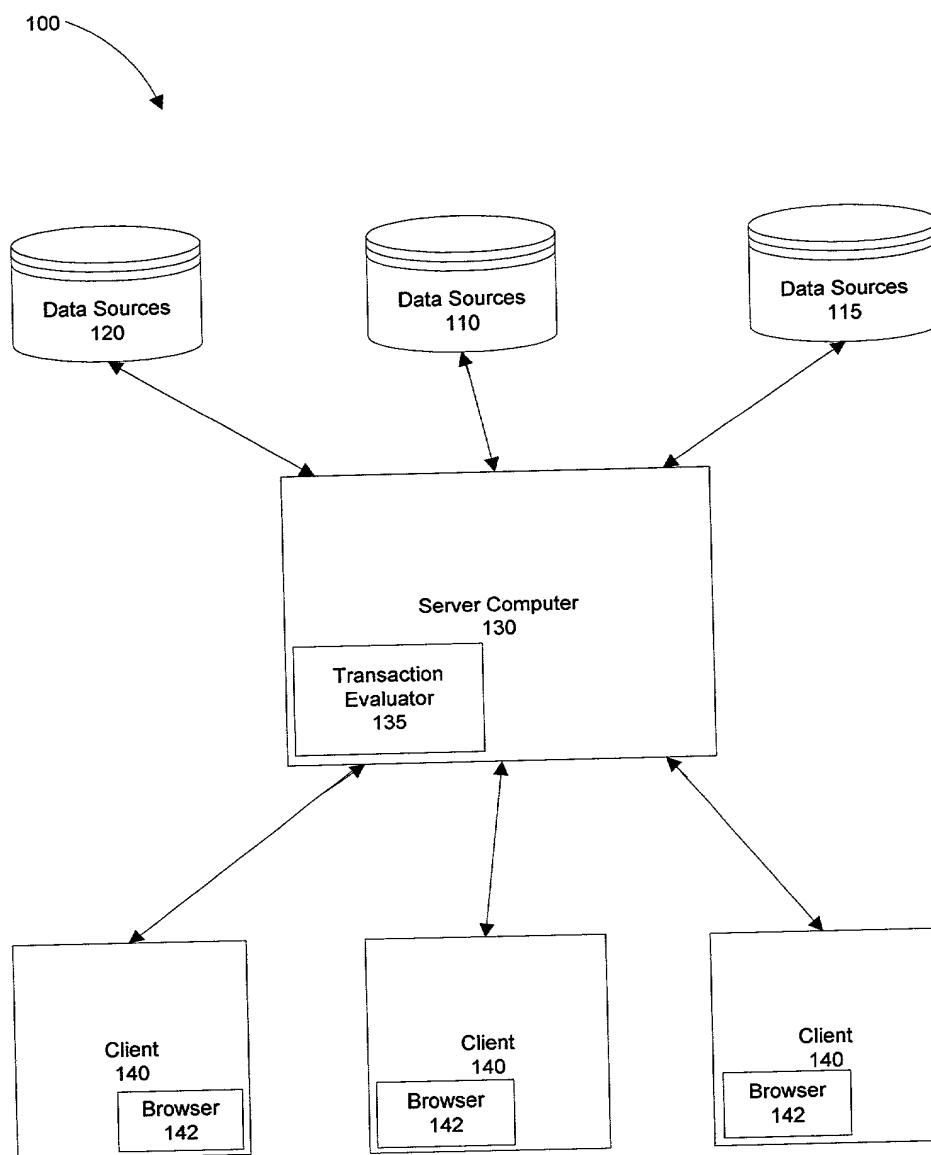
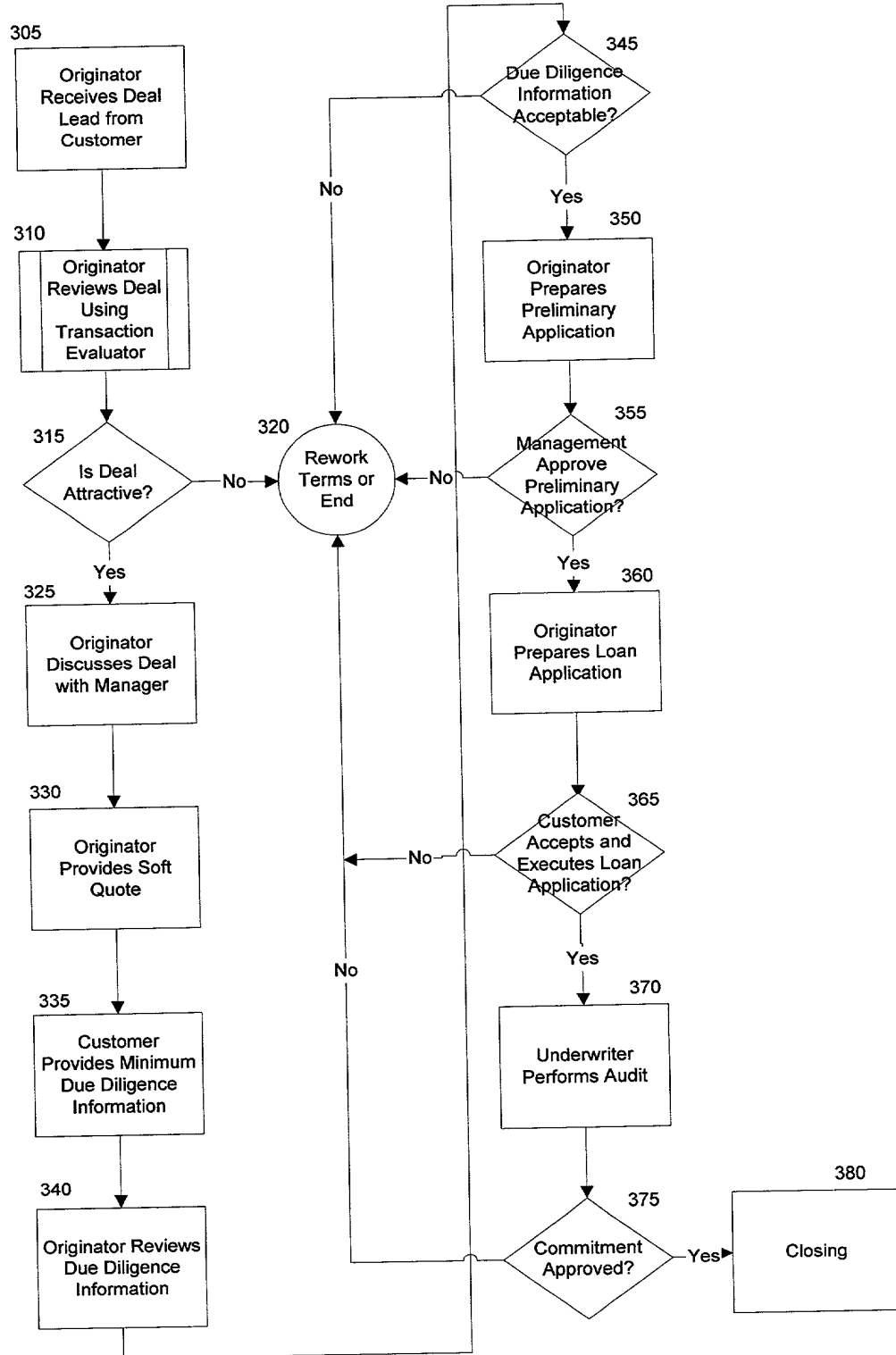


FIG. 1

Overview Of Real Estate
Transaction

FIG. 3



Transaction Evaluation Process

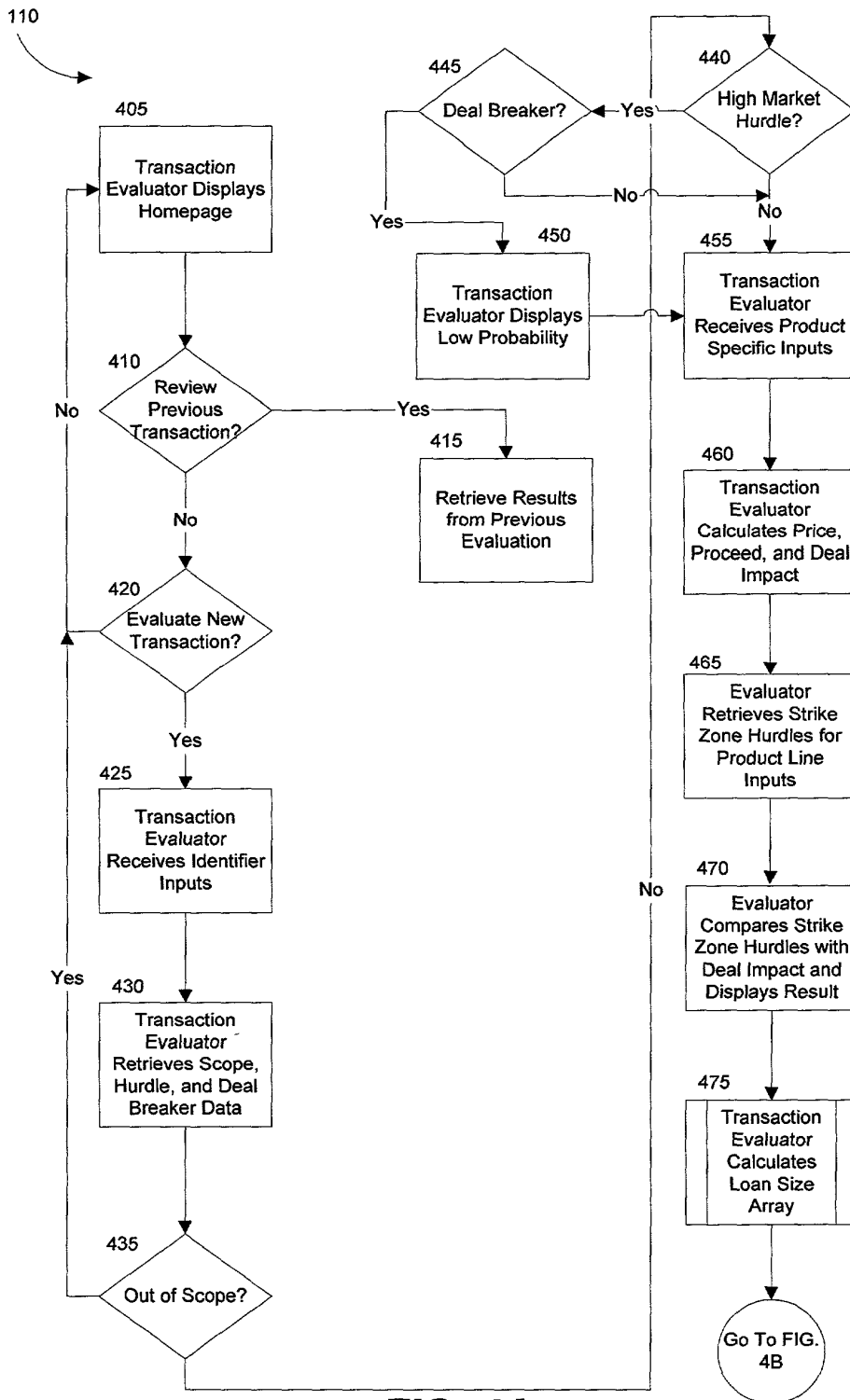


FIG. 4A

Transaction Evaluation Process
(cont.)

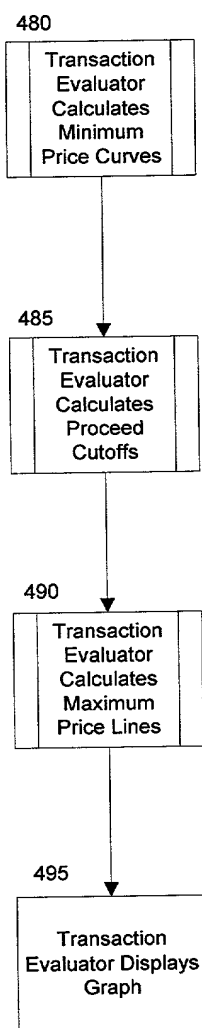


FIG. 4B

Calculating Loan Size Array

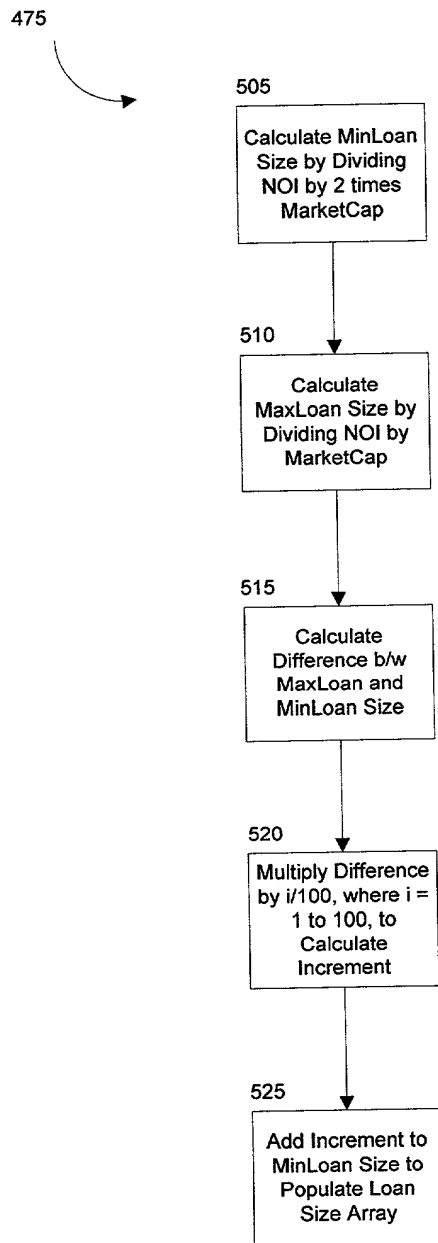


FIG. 5

Calculate Minimum Price Curves

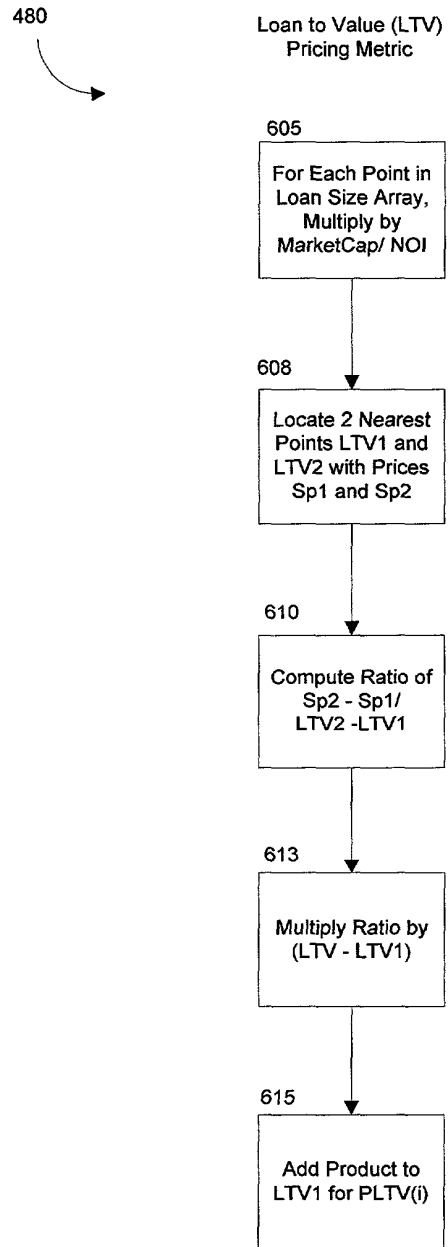


FIG. 6A

Calculate Minimum Price Curves (cont.)

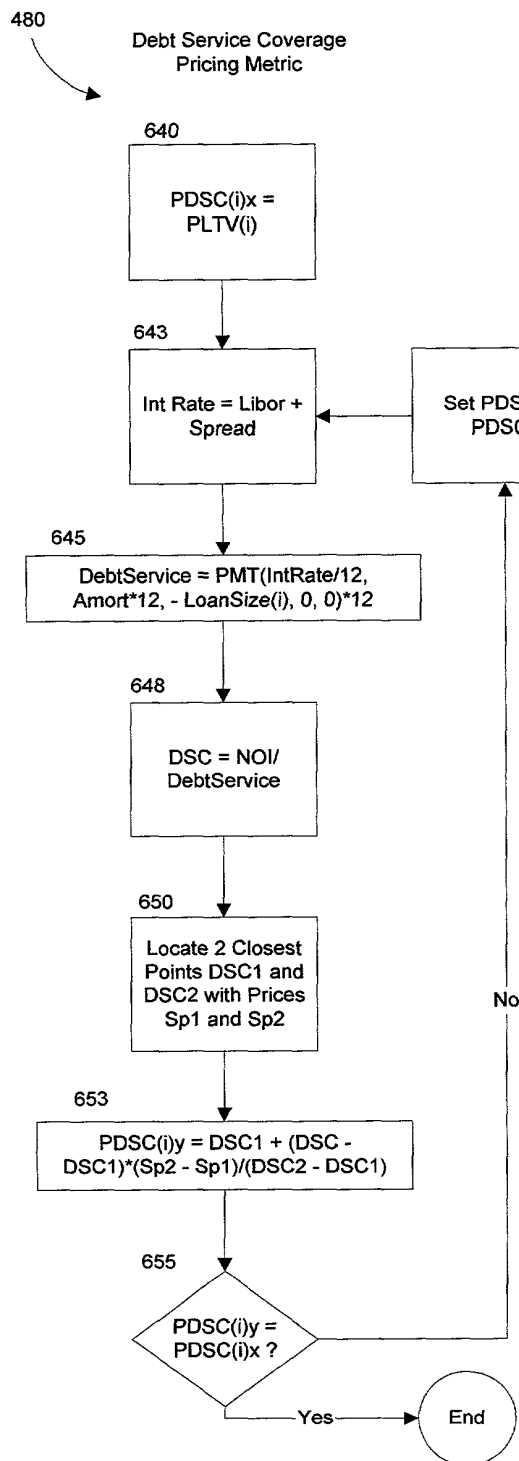


FIG. 6B

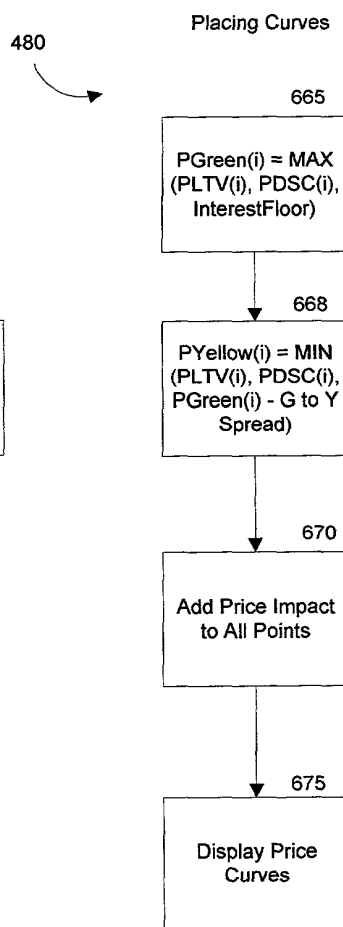


FIG. 6C

Calculate Proceed Cut Off

485

705

$$\text{LoanSizeLTV} = \text{NOI} / \text{MarketCap} * \text{LTVmax}$$

710

$$\text{LoanSizeDSC} = \text{CashFlow} / \text{DSCmin} / \text{PMT}(\text{MinConstInterestRate} / 12, \text{Amortization} * 12, -1, 0, 0) * 12$$

715

$$\text{LoanSizeCoC} = \text{NOI} / \text{CoCmin} / \text{PMT}(\text{MinConstInterestRate} / 12, \text{Amortization} * 12, -1, 0, 0) * 12$$

720

$$\text{LoanSizeGreen} = \text{Min}(\text{LoanSizeLTV}, \text{LoanSizeCoC}, \text{LoanSizeDSC})$$

725

$$\text{LoanSizeYellow} = \text{Max}(\text{LoanSizeLTV}, \text{LoanSizeCoC}, \text{LoanSizeDSC}, \text{LoanSizeGreen} * (\text{MinY} / \text{GRatio}))$$

730

Plot LoanSizeGreen and LoanSizeYellow Curves

FIG. 7

Calculate Maximum Price Curves

490



805

$$\text{MaxPriceDSC}(i) = 12 \cdot \text{RATE}(\text{Amort} \cdot 12, -(\text{CashFlow}/\text{DSCmin}), \text{LoanSize}(i), 0, 0, \text{Libor}) - \text{Libor}$$

810

$$\text{MaxPriceCoC}(i) = 12 \cdot \text{RATE}(\text{Amort} \cdot 12, -(\text{NOI}/\text{CoCmin}), \text{LoanSize}(i), 0, 0, \text{Libor}) - \text{Libor}$$

815

$$\text{MaxPriceGreen}(i) = \min(\text{MaxPriceDSC}(i), \text{MaxPriceCoC}(i))$$

820

$$\text{MaxSizeYellow}(i) = \max(\text{MaxPriceDSC}(i), \text{MaxPriceCoC}(i), \text{MaxPriceGreen}(i) \cdot (\text{MinY}/\text{GRatio}))$$

825

Plot Maximum Price Curves

FIG. 8

Determine Probability Zone for a Point

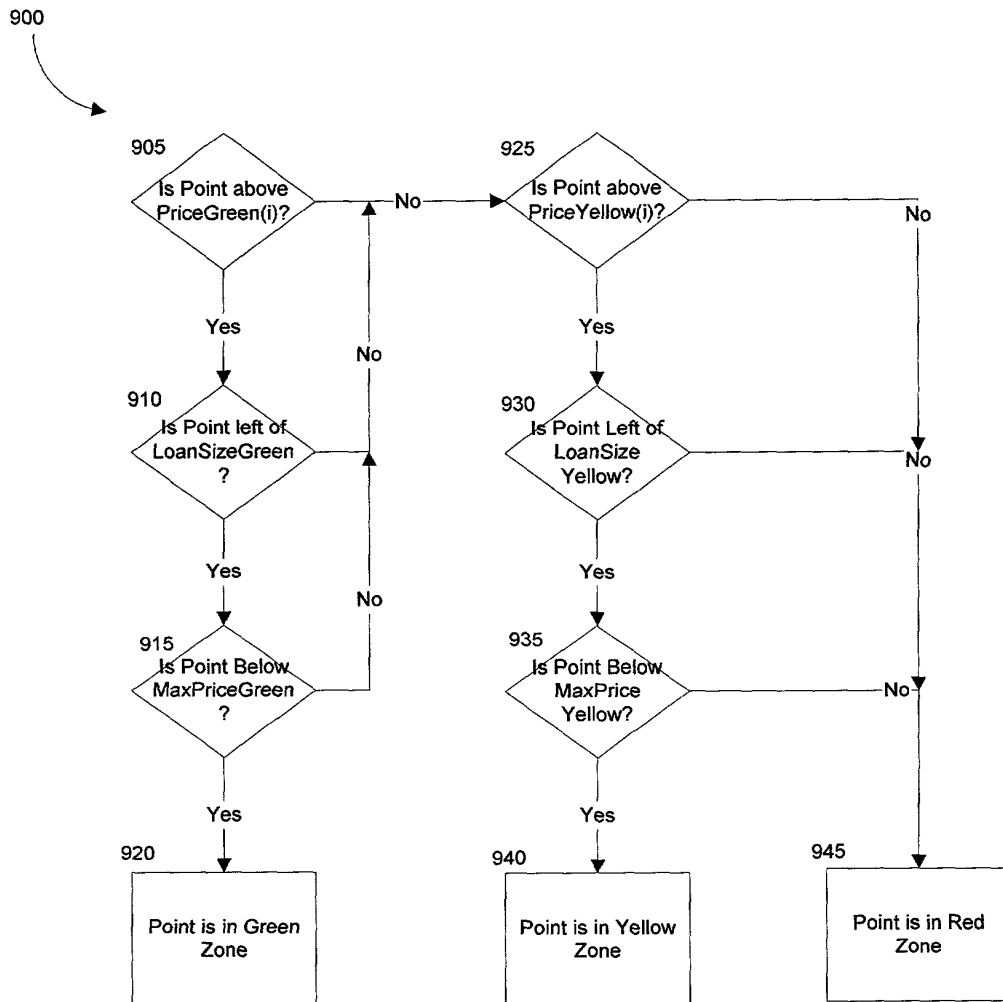


FIG. 9

20250720 06244004

1000

The screenshot displays the 'Digital Deal Screen' (DDS) for GE Capital Real Estate. The interface includes a top navigation bar with the GE logo, 'GE Capital Real Estate', and 'DDS'. A secondary navigation bar shows three steps: 'Parameters' (active), 'Details', and 'Probability'. On the right, there are links for 'Print', 'PDF', 'Export', and 'Help', along with a version indicator 'Denver Office CMBS version 1'. A 'WELCOME' box on the left identifies the user as 'Sample User' and provides a 'Log Out' button. A sidebar menu lists 'Functions' (Statistics, Home) and 'Resources' (GE Intranet, Digital Codepit, SCORE, Market @ a Glance, GECapital RealEstate.com, PPR, On-book Debt Pricing Matrix, CMBS Pricing Matrix, Strike Zone Information, GE Hurdle data, Valuation Assumption Guidelines). The main content area is titled 'Deal Parameters' and contains the following fields:

- Evaluation Date:** Includes a checkbox for 'Use Current Date' and a 'Set' button.
- Deal Name:** Text field containing 'Denver Office CMBS'.
- Market:** Dropdown menu set to 'Denver'.
- Product Type:** Dropdown menu set to 'CMBS'.
- Collateral Type:** Includes a 'Mixed' checkbox and a dropdown menu set to 'Office'.
- Collateral Subtype:** Dropdown menu set to 'General Office'.
- Notes:** A large text area for additional information.
- Market Hurdle:** A visual representation of a hurdle rate with three segments labeled 'Low', 'Med', and 'High'.

A 'Next >>' button is located at the bottom right of the form. At the very bottom, a small footer reads 'Privacy Policy | Terms and Conditions | © General Electric Company 2004'.

FIG. 10

1105

Collateral Type (Pull Down Menu)	Collateral Type (for market hurdle)
Office – CBD (Class A)	Office
Office – CBD (Class B)	Office
Office - Suburban (Class A)	Office
Office - Suburban (Class B)	Office
Multifamily - Class A	Multifamily
Multifamily - Class B	Multifamily
4/5 Star Mobile Home	Multifamily
3 Star Mobile Home	Multifamily
Grocery/Drug Store	Retail
Community Center	Retail
Power Center	Retail
Regional Mall	Retail
Industrial - Class A	Industrial
Industrial - Class B	Industrial
Self-Storage	Industrial

FIG. 11A

1110

Product Type	Product Type (for market hurdle)
On-book Debt, S/T, fixed rate	Debt, S/T
On-book Debt, S/T, floating rate	Debt, S/T
On-book Debt, L/T, fixed rate	Debt, L/T
On-book Debt, L/T, floating rate	Debt, L/T
CMBS (fixed rate)	Debt, L/T
CMBS (floating rate)	Debt, L/T
Equity, S/T	Equity, S/T
Equity, L/T	Equity, L/T

FIG. 11B

20240720 062407

1200

WELCOME
Sample User
10/20/11 11:31 AM
Log Out

Print PDF Export Help
[Denver Office CMBS version 1]

Parameters Details Probability

Digital Deal Screen

Deal Details

Deal Details

Loan Specific

Amortization	30 year amortization
Term	10 years
Deal Purpose	Purchase, >20% equity
Escrows	Tax and Insurance Escrows
Replacement Rsys	\$0.20 per SF or more
Defeasance/YM	Yield maintenance
Lockbox	Lockbox
Interest Only	No interest-only period

Asset Specific

Property Class	A
Tenant Profile	Multiple Tenants
Location	MSA population: >250,000
Lease Provision	>50% of leases expire in any 3-year period
Parking	Suburb - on-site (3.5 per 1,000 SF)

Details

Loan Size	\$10,000,000	Spread (bps over index)	250
NOI after Replacement Reserves	\$1,700,000	CF before Debt Service	\$1,500,000
Cap Rate	9.5%		

FIG. 12

1300

Deal Purpose	Price Impact	Proceed Impact	Deal Impact
Purchase, <5% equity	10	0%	0
Purchase, 5-9.9% equity	0	0%	0
Purchase, 10-20% equity	0	0%	0
Purchase, >20% equity	-10	0%	0
Refinance, 0-5% equity	10	0%	0
Refinance, 5-10% equity	0	0%	0
Refinance, 10-20% equity	0	0%	0
Refinance, >20% equity	-10	0%	0
Cash out	20	0%	0
Deserved cash out (no penalty)	0	0%	0

FIG. 13

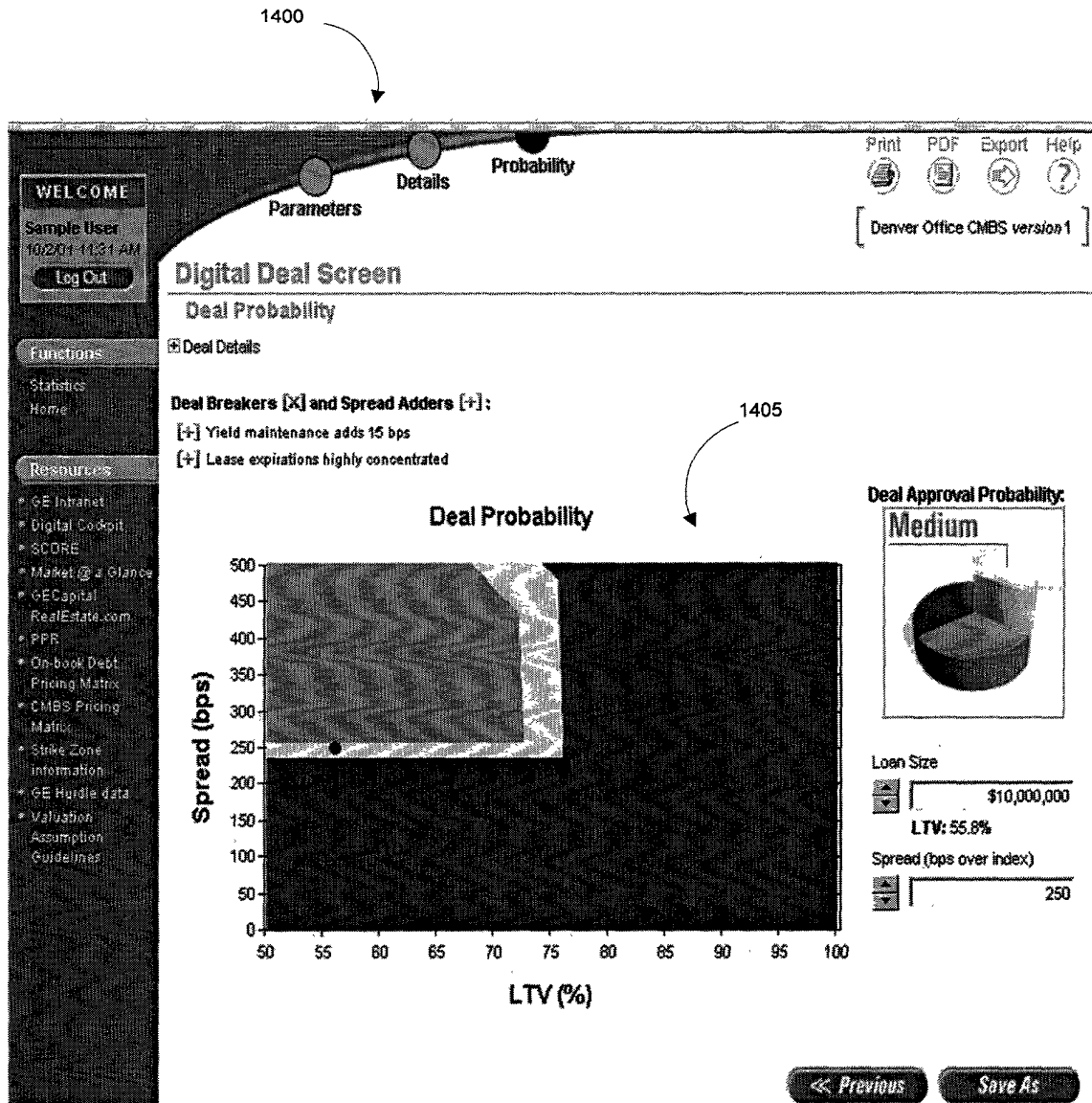


FIG. 14